

$$ECB = ECB_{jan} + \dots + ECB_m + \dots + ECB_{dec} \quad (\text{Equation 502.2. a})$$

Based on:

$$ECB_m = BECON_{mi1} \times ECOS_{mi1} + \dots + BECON_{mii} \times ECOS_{mii} \quad (\text{Equation 502.2. b})$$

Where:

ECB = The annual Energy Cost Budget

ECB<sub>m</sub> = The monthly Energy Cost Budget

BECON<sub>mi</sub> = The monthly Budget Energy Consumption of the i<sub>th</sub> type of energy

ECOS<sub>mi</sub> = The monthly Energy Cost, per unit of the i<sub>th</sub> type of energy

502.3 The monthly Energy Cost Budget shall be determined using current rate schedules or contract prices available at the building site for all types of energy purchased. These costs shall include demand charges, rate blocks, time of use rates, interruptible service rates, delivery charges, taxes, and all other applicable rates for the type, location, operation, and size of the proposed design. The monthly Budget Energy Consumption shall be calculated from the first day through the last day of each month, inclusive.

#### § 434.503 Prototype building procedure.

503.1 The Prototype Building procedure shall be used for all building types listed below. For mixed-use buildings the Energy Cost Budget is derived by allocating the floor space of each building type within the floor space of the prototype building. For buildings not listed below, the Reference Building procedure of § 434.505 shall be used. Prototype buildings include:

- (a) Assembly;
- (b) Office (Business);
- (c) Retail (Mercantile);
- (d) Warehouse (Storage);
- (e) School (Educational);
- (f) Hotel/Motel;
- (g) Restaurant;
- (h) Health/Institutional; and
- (i) Multi-Family.

#### § 434.504 Use of the prototype building to determine the energy cost budget.

504.1 Determine the building type of the Proposed Design using the cat-

egories in subsection 503.1. Using the appropriate Prototype Building characteristics from all of the tables contained in subpart E, the building shall be simulated using the same gross floor area and number of floors for the Prototype Building as in the Proposed Design.

504.2 The form, orientation, occupancy and use profiles for the Prototype Building shall be fixed as described in subsection 511. Envelope, lighting, other internal loads and HVAC systems and equipment shall meet the requirements of subsection 301, 401, 402, 403, and 404 and are standardized inputs.

#### § 434.505 Reference building method.

505.1 The Reference Building procedure shall be used only when the Proposed Design cannot be represented by one or a combination of the Prototype Building listed in subsection 503.1 or the assumptions for the Prototype Building in Subsection 510, such as occupancy and use-profiles, do not reasonably represent the Proposed Design.

#### § 434.506 Use of the reference building to determine the energy cost budget.

506.1 Each floor shall be oriented in the same manner for the Reference Building as in the Proposed Design. The form, gross and conditioned floor areas of each floor and the number of floors shall be the same as in the Proposed Design. All other characteristics, such as lighting, envelope and HVAC systems and equipment, shall meet the requirements of subsections 301, 401, 402, 403 and 404.

#### § 434.507 Calculation procedure and simulation tool.

507.1 The Prototype or Reference Buildings shall be modeled using the